ENVIRONMENTAL ANALYSIS AND DECISION ON THE NEED
FOR AN ENVIRONMENTAL IMPACT STATEMENT (EIS)
Department of Natural Resources (DNR)

Form 1600-8 Rev. 6-90

Region or Bureau
WCR
Type List Designation
II

NOTE TO REVIEWERS: This document is a DNR environmental analysis that evaluates probable environmental effects and decides on the need for an EIS. The attached analysis includes a description of the proposal and the affected environment. The DNR has reviewed the attachments and, upon certification, accepts responsibility for their scope and content to fulfill requirements in s. NR 150.20(2)(e) and NR 150.22, Wis. Adm. Code. Your comments should address completeness, accuracy or the EIS decision. For your comments to be considered, they must be received by the contact person before 4:30 p.m., _____. (date)

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Applicant: Non-metallic mining industry, Marathon County

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Title of Proposal: Generic Environmental Assessment for Grading, Dredging, Channel Connections/Changes or Other Similar Activities Associated with Non-metallic Mining Operations In or Near Navigable Waters in Marathon County

Location: County Marathon City/Town/Village _____

Township Range Section(s)
_____

PROJECT SUMMARY - DNR Review Information Based on:

The Department of Natural Resources (DNR) is proposing to exempt qualifying nonmetallic mining

projects in Marathon County from normal environmental review requirements before deciding to issue or deny mandatory permits. To be eligible for the streamlined review process, projects must be sited, designed, and operated according to criteria (Appendix A) specifically developed to assure such projects will not result in significant adverse environmental impacts. This generic environmental assessment (EA) examines the reasonableness of the criteria and the determination that mining proposals meeting such criteria would not be expected to pose significant environmental impacts.

Siting, design and operation of new (or expanded) nonmetallic mineral (i.e. sand and gravel, topsoil etc.) mining activities in Marathon County greatly determine the associated risk of environmental impact. By incorporating separation distances from rivers/streams, avoiding sensitive habitats (i.e. wetlands, endangered threatened species, etc.), incorporating measures to prevent adverse water quality discharges and erosion, and insuring site reclamation after target mineral deposits are removed, the risk of significant environmental impacts is minimized. Applicants are typically more interested in the most efficient and economical means to site and design their new operations. Over time it has become evident that incorporation of specific conditions in County and DNR nonmetallic mining permits is not an optimally effective means of preventing adverse impacts. Experience in Marathon County has shown that effective environmental protection is better achieved when such projects are sited and designed to avoid such adverse impacts in the first place. This environmental assessment describes a cooperative industry/county/DNR mining project review process (including siting, design and operational standards) that encourages applicants to locate and design their projects in an environmentally sound manner, while still allowing an efficient mining operation. An additional advantage for applicants would be faster turn-around time in county/state regulatory review processes. In addition, current duplicative county and state regulatory reviews of mining project proposals would be consolidated.

The Department of Natural Resources (DNR) has developed an agreement with Marathon County that will shorten the DNR permit application turnaround time for qualifying mining operators if specific project siting, design and operational criteria are met. For qualifying projects Marathon County zoning officials would provide assistance in site inspection, public notification, bonding, and permit issuance.

The county and state permitting processes are both designed to help assure nonmetallic mining operations are conducted in an environmentally sound manner (i.e. to protect biological communities, prevent adverse surface and groundwater impacts, maintain aesthetic and recreation values, etc.). Under Marathon County's Nonmetallic Mining Reclamation Ordinance applicant's for new (or expanded) mining are required to obtain a permit from the county. The application must include, along with other requirements, measures for site screening, erosion control and site reclamation. A bond or other evidence of financial responsibility must be obtained to cover reclamation costs.

Permits from the DNR are also required if the mining activity is adjacent to navigable waters (Chapter 30, Wis. Stats., and Chapter NR 340, Wis. Adm. Code). In considering new (or expansion) sand and gravel mining applications, the DNR is required, according to NR 150.03, Wis. Adm. Code, to prepare an environmental assessment (EA) for each application before it can issue/deny a permit. The purpose(s) of preparing the EA are 1) to identify and consider the environmental effects of the project before approving/denying the permit and 2) provide an opportunity for public input to the decision-making process. An EA is commonly used to identify measures that can be used to prevent significant impacts. Such measures are then commonly incorporated as required permit conditions. Typical conditions would include, among others, site screening, erosion control, site reclamation and posting of a bond (i.e. the exact same conditions as required by the county permit). Other DNR permit conditions would typically include: no disturbance in or along outstanding/exceptional resource waters or trout streams; no disturbance to identified sensitive areas such as wetlands, rare species or habitats they use or historical/archeological sites; wastewater discharge limits if there are any washing/dewatering operations; and any excavated floodplain ponds are designed to prevent fish kills and assure public access to the pond.

In light of the duplicative and time consuming processes that now exist, the DNR and Marathon County developed a set of nonmetallic mine siting, design and operational criteria (Appendix A) that are expected, in most cases, to prevent significant adverse environmental impacts. DNR proposes that, if an applicant's

project satisfies such criteria, they would not normally prepare an environmental assessment for that project (i.e. if the proposed project satisfies criteria developed to prevent adverse impacts, the project would be exempted from further DNR environmental review). If any of the criteria are not satisfied or if there are other environmental issues/conditions that are not adequately addressed in the criteria listed, an individual EA would be prepared as in the normal review process. The individual EA, by referencing this document and Appendix A, need only address the issue(s) not listed in the Appendix. If the criteria are met and an EA is not prepared, there would still be an opportunity for public input before DNR would make a decision to approve/deny the project, via standard public noticing requirements. Even if an individual EA is not prepared, DNR would still be able to incorporate any other permit conditions (not addressed by the criteria listed in Appendix A) it felt were needed to assure the project would not result in major environmental impacts.

This document, referred herein as a generic EA, examines the reasonableness of the criteria listed in Appendix A warranting no need to prepare an individual EA. By not having to prepare an individual EA for qualifying projects, DNR water regulation staff will be freed-up to spend their time on higher environmental risk nonmetallic mining projects that do not meet the criteria listed.

Geologic Setting and Historic Sand and Gravel Mining Activity in Marathon County

Marathon County's location in the geologic landscape has left it with large deposits of sand, gravel, and granite. Sand and gravel are remains from the Wisconsin Ice Age, which partially covered the county until approximately 12,000 years ago (Figure 1). The Green Bay Lobe covered eastern Marathon County and the Wisconsin Valley and Chippewa Lobes were located in the north and west sections of Marathon County. Glacial meltwater streams carried large amounts of sand, gravel and cobble deposited these materials in well sorted layers downstream. These former meltwater streams are still flowing today as the Wisconsin, Big Rib, Big Eau Pleine, Trappe, Eau Claire, and Plover Rivers. These river systems have extensive sand and gravel deposits along their stream terraces and floodplains. In general, commercially valuable sand and gravel is deposited in a narrow band close to rivers. Adjacent upland deposits of gravel have a greater silt and clay content with underlying weathered crystalline bedrock, which lowers its desirability. According to DNR resource professionals, the Big Rib River tends to have more cobble sized rocks while the Eau Claire and Plover Rivers have more gravel sized rocks. The well sorted, concentrated deposits are mined extensively and used as road building materials and for concrete production.

The combination of the County's location on the southern end of the exposed bedrock Precambrian Shield and the erosion that occurred during the last Ice Age has left significant areas of granite with a relatively thin layer of till covering (Figure 2). One particular form of granite, called grus, is mined extensively in Marathon County. Grus is also called disintegrated or rotten granite. Quartz and feldspar grains are disaggregated so that the material can be removed without blasting or crushing. There are roughly four grus deposits in the county which provide a majority of the mined material (Figure 3). Since these deposits represent nearly all of the grus found in the county, future mining will be limited to these deposits, which cover approximately 98 square miles. Granite is located more in upland areas and is more prevalent along smaller tributary streams. Grus is usually used in road building, but may also be used for decorative and landscaping purposes.

Due to the abundance of deposits of both grus and other types of river gravel, over 200 nonmetallic mines encompassing more than 2500 acres have been permitted in Marathon County since 1968 (Figures 4 and 5). Most (126) are located along the large rivers noted above. Given the continually increasing gravel and grus demand and increasing monetary value associated with such deposits (Briggs and Ostrom 1975, Reuss, Latour, and Evans 1977, Hill and Evans 1978-79) the interest in new (and expanded) nonmetallic mining operations is expected to continue through the foreseeable future.

Applicable Authorities

Nonmetallic mining activities in Marathon County, depending on their location, design and operation, are potentially subject to a wide range of federal and state regulatory requirements. All projects require county permits.

Federal (Corps of Engineers) regulatory authorities (would only apply as specified):

Section 404 of the Federal Water Pollution Control Act Amendments of 1972 (if project involves wetland filling)

Section 10 of the River and Harbor Act of 1899 (if project includes dredging/filling on the bed of a federally navigable waterway)

(Since Appendix A does not include projects with dredging/filling described above, Corps regulatory involvement would not be expected)

State regulatory authorities that may apply include, but would not necessarily be limited to:

Water Quality

Chapter 1 Wisconsin Statues
- Section 1.11 Governmental Consideration of Environmental Impacts

Chapter 30 Wisconsin Statutes
- Section 30.19 Ponds and Grading
- Section 30.195 Channel Changes
- Section 30.20 Dredging

Wisconsin Administrative Code
- NR 103 Water Quality Standards for Wetlands
- NR 116 Wisconsin Floodplain Management Program
- NR 135 Mining Reclamation Standards for Nonmetallic Mines
- NR 140 Ground Water Standards
- NR 150 Environmental Analysis and Review Procedures for Department Actions
- NR 299 Water Quality Certification (If Corps of Engineers permit required)
- NR 340 Nonmetallic Mining and Reclamation Associated With Navigable Waterways and Adjacent Areas
- NR 347 Regulation of Dredging Projects

Water Discharge

Wisconsin Administrative Code
- NR 216 Storm Water Discharge Permits (Chs. 281 & 283, Wis. Stats.)
- NR 269 Stone, Gravel, and Sand segment of Mineral Mining and Processing (Chs. 281 & 283, Wis. Stats.)
- NR 500 Solid Waste Management (Ch. 289, Wis. Stats.)

Air Permits

Wisconsin Administrative Code
- NR 400 Air Pollution Control Permits (Ch. 285, Wis. Stats.)

County regulatory authority includes:

Chapter 59, Wisconsin Statutes
- Section 59.69 Planning and Zoning authority (County and Towns)
- Section 59.692 Zoning of Shorelands on Navigable Waters

Chapter 66, Wisconsin Statues
- Section 295 Authorizes Nonmetallic Mining Reclamation Ordinances and Penalties

Chapter 87, Wisconsin Statutes
- Section 87.30 Floodplain Zoning

Wisconsin Administrative Code
- NR 115 Wisconsin Shoreland Management Program
- NR 116 Wisconsin's Floodplain Management Program
- NR 135 Nonmetallic Mining Reclamation Code

Recent passage of NR 135, Wisconsin Administrative Code (nonmetallic mining reclamation) requires that a county permitting program be in place to assure mine reclamation. These standards have already been implemented in Marathon County.

Existing Standard Review Process

The current review process is lengthy (often takes 7-12 months) and involves numerous steps. Initially the DNR and Marathon County personnel are informed that an operator is planning on submitting an application. DNR and County personnel will visit the site and discuss the project with the applicant. Oftentimes concerns or potential problems are addressed at this initial site visit. The first meeting allows applicants to address site concerns before the state and county applications are filled out and submitted. A county application is then submitted and reviewed by Marathon County Staff for adherence to Chapters 15, 17, 18, and 21 Marathon County Zoning Ordinances. Additionally, after a state application is submitted to the DNR under Sections 30.19, 30.195, or 30.20, Wis. Stats., the DNR reviews the project and compiles a site-specific Environmental Assessment (EA) to determine if a more detailed Environmental Impact Statement (EIS) is needed. The EA data are assembled by the fish, wildlife, water quality and water management specialists. The site-specific EA is used to examine the anticipated impacts to the site and address environmental concerns. When complete, the EA and the project are publicly noticed to solicit any comments from the general public. If no comments are received the EA is certified that it satisfies environmental review requirements and no EIS is required. Applicable DNR and County permits are then issued with site-specific design and operational conditions and bonding levels set by both the state and county. If state bonding levels are higher, the County will release their bond in those areas covered under NR 340. The applicant is then free to proceed with the nonmetallic mine.

If substantive public comments are received on the EA, before deciding to issue required permits, the DNR will either directly respond to the comments, amend the EA to address concerns raised or prepare an environmental impact statement (EIS). Since passage of environmental review laws in the 1970's, DNR has never prepared an EIS for a nonmetallic mining project.

Yearly inspections are done by the DNR and County to ensure that the project is in compliance with the conditions set forth in the permit. Costs of completing any reclamation not finished after the mining process will come out of the bonding set forth during the application process. If any violations occur, enforcement action is taken by the DNR and County under the authorization of the permit.

Proposed Streamlined Process

The proposed use of the generic EA will not result in significant changes to the general process for permitting a nonmetallic mine. Initially the DNR and Marathon County personnel will be informed that an operator is planning on submitting an application. DNR and County personnel will visit the site and discuss the project with the applicant. The purpose of the site visit will be to discuss concerns and potential problems and to make a preliminary determination if the project will meet the eligibility requirements of the generic EA. The first meeting allows applicants to address site concerns before the state and county applications are filled out and submitted. The operator will then submit a joint county and state application packet. To qualify for an EA exemption, the proposed project will need to meet required siting, design and operational criteria (Appendix A). The permit criteria are generally process and reclamation-oriented standards. The applicability criteria would exclude sites that would need a more involved, site-specific EA. The DNR water management specialist will confirm the site's applicability for the generic EA and determine if the permit criteria can be met. A brief examination by DNR resource managers will be used to confirm the site's eligibility and address any concerns. Additional environmental impact concerns and specific site information will be attached as an addendum. If all conditions are met and concerns satisfied, the DNR will send an eligibility letter with required permit conditions to the County that will be incorporated into the joint DNR and County final permit. Under current law, before a permit may be issued, a class I public notice must be published in accordance with s. 30.19(3). This notice will incorporate language declaring the EA certified if the project qualifies for the EA exemption. In order to consolidate the public notice and bond processes, the DNR expects to pursue legislative language that would allow the County to hold bonds and publish project notices that are required by State Statute**.** After these requirements are met, a joint DNR and County permit will be issued with any site-specific conditions specified by the DNR and bonding levels will be set. The applicant is then free to proceed with the project.

Yearly inspections by County staff will be done to ensure that the project is in compliance with the conditions set forth in the permit. Any reclamation not finished after the mining process will be funded from the bonding set forth during the application process. If violations occur, necessary enforcement action will be carried out by the County and DNR under the authorization of the permit.

Rationale/Goals for Streamlined Process

Of the above listed authorities, for purposes of this analysis the most applicable is NR 150, Wis. Adm. Code. The development of a generic EA is authorized under s. NR 150.20(2)(e), Wis. Adm. Code. State law provides that a generic EA may be developed "if the environmental effects of certain actions are likely to be repeated on a recurring basis or actions which have relevant similarities such as common timing, impacts, alternatives, methods of implementation or subject matter." Nonmetallic mineral mining projects that meet all the criteria in Appendix A are likely to have similar environmental effects. Accordingly, use of this generic EA, in lieu of a single EA for each individual project proposal that meets all criteria in Appendix A, is warranted.

The goal of this generic EA is to analyze the scope, extent and significance of environmental effects associated with both the establishment of a streamlined permit/environmental review process, and the operation of mining projects that would be permitted under such a process. Department staff believe that implementation of this revised process will encourage applicants to site, design and operate new or expansion mining projects in a manner which would prevent significant adverse environmental impacts. Criteria listed in Appendix A have been developed for the specific purpose of assuring that proposed mining operations would be sited, designed, and operated such as to prevent adverse impacts. Projects that adhere to the criteria in Appendix A would therefore meet the standard of "relevant similarities" as described in NR 150.20(2)(e) above.

Aside from preventing adverse environmental impacts by adherence to listed criteria, there are other reasonably foreseeable benefits made possible by preparation of this generic EA.

The criteria in Appendix A would provide applicants a clear understanding of what is expected of them in order to receive a permit. Barring unusual site-specific circumstances, applicants can expect their projects will be approved if their projects adhere to all criteria listed. Similarly, since the criteria would become the minimum standards under which a project can be approved without an in-depth, project-specific environmental review, the criteria themselves should promote more consistency in DNR and County permit decisions.

In addition to greater consistency, a reduction in workload for DNR personnel was a key factor that prompted development of this EA. Utilizing the generic EA allows for a faster and more streamlined permit review process, thus resulting in reduced permit review backlog and the issuance of permits in a much more timely manner.

Through the development of this generic EA, the opportunity exists to develop a permit review partnership with Marathon County governmental officials and local mine operators. Nonmetallic mining operations that are designed and operated with the criteria specified in this generic EA, will allow for an abbreviated review by the DNR. Marathon County staff will handle day to day supervision and inspection of the nonmetallic mining operation. In exchange for the County assuming this role, the DNR will exclusively assume responsibility for review of shoreland grading activities in excess of 10,000 square feet that would normally require both county and state review. A partnership was also created with mine operators through their input during the EA development process. In the future, these partnerships will allow a better working relationship between the DNR, Marathon County, and mine operators by facilitating better communication and more consistency in the permitting process with the state and the county.

How Will Adherence to Eligibility Criteria (Appendix A) Assure There Will Be No Significant Adverse Environmental Impacts For Qualifying Projects?

Interdisciplinary DNR and county zoning staff met to identify what they believe to be real (or potential) adverse environmental impacts from past mining development patterns in Marathon County. Key site impacts identified were: riparian habitat fragmentation; physical loss of or functional value degradation in wetlands/floodplains; on-site erosion and discharge of sediments to adjacent surface waters, with associated coverage of fish spawning and other productive in-stream habitat, interference with fish respiration, spills of contaminants from mining machinery and associated adverse impacts to water quality; lowering of groundwater levels due to mine pit dewatering with associated impacts to springheads, thermal impacts to receiving waters, impacts to private wells, and loss in aesthetic quality for river users.

The team identified measures that would allow for mining under certain conditions that would prevent these impacts from occurring. The measures (i.e. separation distances from sensitive habitats, erosion control, spill abatement and response, and vegetative buffers) were then consolidated into Appendix A as minimum requirements in mine project siting, design and operation that would be expected to prevent the identified impacts from occurring. As such, a detailed individual environmental review for such projects would NOT be required since the projects already had been planned in an environmentally sound manner.

Key impact areas identified by the team were: terrestrial, aquatic, surface water, ground water, aesthetic, and air quality impacts.

Siting

Parameters were developed to determine if proposed mine sites meet the EA exemption criteria or if a site specific EA will be required (Appendix A). In all cases, if any one of the EA exemption criteria is not met, an individual EA is required. The following criteria have been developed based on over 75 combined years of professional resource managers experience, to prevent significant adverse environmental impacts in especially unique or sensitive areas while providing clear and consistent design standards and consolidating local and state permitting.

1. Siting mines adjacent to Outstanding Resource Water (ORW), Exceptional Resource Water (ERW), a classed trout stream, or an unclassed trout stream risks high potential for adverse water quality and thermal impacts. To address these potential impacts, a criteria was developed that precludes any proposed mine located adjacent to O/E resource or trout waters from being eligible for an EA exemption. Therefore, location of a proposed mine site adjacent to a waterway designated as an O/E Water or trout stream requires the use of a site specific EA. A map of these waters (Appendix B) is provided with the application packet and DNR's water management specialist and fisheries biologist will be used to officially confirm the status of these protected areas.

2. If the location of a proposed mine site is determined to potentially contain a state or federally endangered (E) or threatened (T) species or habitat suitable for their existence/use, consultation with endangered resource specialists will be conducted to determine if the project will impact such species. If so, an individual EA must be prepared. Siting in or adjacent to terrestrial/aquatic habitats known to be used by E/T species could result in further decline of such resources. Any projects located or designed where such resources exist are not eligible for an EA exemption. DNR water management specialists are currently required to perform this review. The National Heritage Inventory (NHI) data will initially be used to make species presence determinations (Appendix C). The applicant (via qualified consultant) may be required to conduct E/T species surveys.

3. Siting in areas of historical or archaeological significance risks damage to public interests in state and local cultural landmarks. Any area determined to be historically or archeologically significant by the water management specialist, using up-to-date data bases provided by the State Historical Society (SHS), will be screened (in consultation with SHS staff) to determine if the project will impact such resources. If so, a site specific EA must be prepared. Furthermore, the applicant may also be required to conduct additional surveys.

4. Siting next to areas of significant public interest or use may decrease aesthetic and environmental values of publicly owned land. Therefore, if a proposed site has more than two-thirds (66%) of the immediately adjacent land in public ownership, an individual EA must be prepared (Appendix D). Land ownership determinations will be made through current deeded ownership as recorded by the Marathon County Register of Deeds office.

Finally, an individual EA may be prepared for any proposed nonmetallic mining site at the DNR's discretion for reasons not specifically mentioned above. This includes environmental, aesthetic, or other concerns that water management staff believe warrant preparation of an individual EA.

Design

1. Wetlands and areas adjacent to streams are sensitive habitats that provide a wide variety of functional values and benefits. Through a literature review and the professional experience of DNR resource managers, criteria were developed to minimize impacts to these environments. To qualify for an EA exemption, projects must be located at least 100' from any wetland or navigable water and have a Vegetative Buffer Agreement filed and recorded with the Marathon County Register of Deeds (Appendix E).

By its nature, mining is an invasive action that results in the removal of material from the earth. Trees, shrubs, grasses, and other flora are removed by mining activities and as a result the associated wildlife is affected (Marzolf 1978). The U.S. Corps of Engineers found in a Kansas River Study (1982) that mining operations had an impact on wildlife due to displacement of both the wildlife and vegetation. The Corps concluded that impacts over the life of the pit would increase as more area was mined. Breeding, nesting, feeding, and other activities were impacted negatively as a result of habitat loss. In addition to affecting the wildlife that inhabits the excavation site, a mine has a much larger impact on the surrounding landscape. Habitat fragmentation occurs when bits and pieces of the larger landscape are changed, creating a patchwork of various habitat types rather than one larger continuous habitat (Sheate 1986). This fragmentation changes the wildlife community by favoring species adapted to multiple habitat types or those

that prefer edge habitat. Species that depend on large contiguous expanses of habitat, or interior species, become negatively affected and ultimately decline in population. Therefore maintaining wooded corridors along streams and providing buffers around wetland areas allows the opportunity to afford some measure of protection to sensitive species.

In addition, aesthetic impacts of mining can also be considered detrimental to the landscape. The most notable impact from nonmetallic mining is the removal of site vegetation and the stockpiling of topsoil and overburden. Although this practice is extremely visually intrusive, it is a current common practice employed to reduce off site erosion while also blocking views from outside the mined area.

Increased vehicle activity, road creation and noise pollution is also a negative impact associated with nonmetallic mining. Reduction in access roads helps to concentrate this activity, but short term noise and traffic pollution is inevitable during the active mining phase.

By providing a 100 foot buffer around wetlands and streams, negative aesthetic impacts from nonmetallic mining will be decreased. Although noise and traffic pollution will remain the same as with a site-specific EA, increased buffers around wetlands and along river and stream corridors will more adequately obstruct visual impacts and provide better noise absorption associated with the mined areas.

2. Reclamation standards were set by DNR resource managers and from a literature review to provide guidance in obtaining optimum wildlife habitat and to determine best practices for reclamation and revegetation.

Mining activities often lend to transformation of one type of biotic community to another. Pre-mined areas that are generally forested often are reclaimed as grassland, marsh, ponds, or wetland after mining is completed. This often affects species diversity as well as abundance. Chabwela (1982) found that meadow voles were favored in reclaimed mining sites over other woodland small mammal species that had been previously present. However, despite the loss of some species during the mining process, species diversity generally increases on reclaimed sites that had ponds (Ugoretz 1987).

When restoring an area, native plants are the most desirable for reintroduction (Matter and Mannon 1988). In practice however, exotic species are used to a much greater extent (Morrison 1982). Arguments against requiring the restoration of native plants include: seed availability, difficulty in establishment, and lower productivity of native species in contrast to introduced species. However, concerns of pest species invasion such as purple loosestrife (*Lythrum salicaria*) and reed canary grass (*Phalaris arundinacea*), and inapplicability of non-native species as food sources suggest that whenever possible native species are much preferred in restoration.

3. Pond design and reclamation are an important aspect when recovering the landscape from nonmetallic mining. Criteria developed by DNR resource managers and from a literature review were developed to assure sound pond design (Appendix A).

Due to the alluvial nature of sand and gravel deposits, many mines are located adjacent to navigable waterways. These riparian zones frequently support a greater number of species of plants and animals than adjacent upland habitat (Carothers et al. 1974, Davis 1977). Riparian zones generally occupy a smaller percentage of total area than upland communities (Swift 1984) and therefore are important in maintaining biotic diversity in an area. Excavation of material often leaves portions of the resulting landscape below the water table. Ponds and wetlands that are formed as a result of this process serve as habitat for a wide variety of species. Reptiles and amphibians utilize the proximity of aquatic habitat to upland habitat and many other wildlife species utilize water for at least a part of their life cycles. The creation of ponds and wetlands can result in a more diverse landscape.

During periods of high water or if there is a connection between the pond and the stream, there is the possibility of fish exchange. While the pond may provide additional habitat for stream species, the possibility exists of fish becoming entrapped in the pond when the high water recedes or if the pond/stream

connection is lost. Ross and Baker (1983) demonstrated that some species of fish exploited these areas, while others remained in the stream. This selectivity shown by fish may lead to different species communities existing in unconnected ponds versus the stream. However, fish entrapment and death due to poor habitat requirements still may occur due to life requirements of some fish species. Therefore, to use the generic EA permits will require minimum depths of 12 feet (Klingbiel et. al. 1914) in these ponds to support fish that become trapped. In addition, public access must be provided for ponds located in floodplain areas. Pond shaping and depth requirements were based on resource managers experience to ensure reclaimed areas provide wildlife and fisheries functional values.

Operation

1. The major sources of pollution from most excavation sites are erosion from haul roads, spoil piles, newly excavated areas, wash water discharges, dewatering processes and active excavation itself. To halt rampant sediment control problems on mine sites, erosion control measures including: detention ponds, process-water holding ponds, vegetated drainage diversion ditches, silt fencing, sediment screens, rock riprap, and vegetation stabilization are required through the completion of an erosion control plan as a condition for the use of the generic EA.

The close proximity of mine sites to waterways has the potential to be detrimental to fish and other aquatic species that inhabit those waterways. Earth disturbing activities remove vegetation and leave surfaces susceptible to erosion. Rainfall runoff can potentially introduce large amounts of sediment to a waterway. Once in the water column, the suspended sediment will impact large stretches of stream, depending on sediment and stream characteristics. Dredging operations have been found to decrease invertebrate biomass and density up to several kilometers downstream (Cordone and Kelly 1961, Rivier and Seguier 1985). Ziebell (1957) found that invertebrates were reduced by 98% at approximately 90 m below the discharge of a gravel washing operation in the state of Washington. Conditions did not return to normal until 10.5 km downstream. Increases in sedimentation from dredging and erosion initially result in a decrease in density of invertebrates, and then, as gravel substrate is silted in, species composition decreases (Marzolf 1978). In addition to invertebrate populations, mussel populations also suffer from sedimentation (Grace and Buchanan 1981). Slower growth rates occur in mussels that live in very turbid water (Yokley and Gooch 1976), and decreased fish populations in turbid water inhibit the ability for mussel larvae to complete their life cycle on fish as hosts (Crunkilton 1982).

The primary effect of sedimentation on fish populations is the elimination and destruction of spawning beds. Increased turbidities and siltation of gravel beds can affect reproduction and the development of fish eggs, especially trout and salmonids that are coarse substrate spawners (Cordone and Kelly 1961, Rivier and Seguier 1985). Sediments deposited in the stream can hinder water flow in gravel and sediment can settle around eggs. This inhibits the exchange of gasses resulting in egg mortality and interference with fry emergence (Woodward Clyde Consult. 1976, Rivier and Seguier 1985). In France, high suspended sediment concentrations resulted in 75% mortality for brown trout eggs compared to 20% for undisturbed sections of stream. In addition, suspended solids from erosion can abrade the protective slime coatings of fish gills and bodies leading to increased bacterial and fungal infections (Cordone and Kelly 1961, Rivier and Seguier 1985). Increased stream sediments also may impair feeding by blocking vision (Rivier and Seguier 1985). Therefore, creating an erosion control plan is critical to the environmental success of any nonmetallic mine.

2. A Wisconsin Pollutant and Waste Discharge Elimination Permit (WPDES) is required for use of the generic EA. This permit addresses discharge concerns and water discharge amounts that will impact the environment.

Dewatering may occur on sites that excavate below the water table. In order to access the material of interest, ground and surface water that flow into the open pit is pumped out and allowed to flow into nearby streams. In Marathon County, sand and gravel mines do not generally dewater. The material is simply removed from below the water surface by excavating equipment. Granite and hard rock mines however, do dewater their excavation pits in order to access the rock. This pumping can be variable in regards to

duration and volume. Mines are generally inactive during the winter months and so spring pumping is done to remove the water that has collected in the pits over the winter. Once pits are sufficiently empty of water, pumping is done intermittently throughout the work season as needed. The frequency of pumping is variable depending on precipitation and groundwater characteristics of each site.

Dewatering activities may affect receiving streams. In some instances, dewatering may contribute a significant amount of sediment to the stream, if best management practices are not implemented. Water that flows over longer distances or over land that has a good vegetated cover will decrease its sediment load more substantially than if the flow path is short or sparsely vegetated. During dewatering, streamflow may increase for short periods, which in turn may affect fish and other aquatic species. Stream temperature may also increase if water removed from the mine pits is warmer than the stream water. Significant increases in water temperature may make conditions unsuitable for some trout species unless warm water discharges to cold water streams are done in accordance with State thermal discharge standards. Therefore, a Wisconsin Pollutant and Waste Discharge Elimination Permit (WPDES) is required for use of the generic EA. This permit addresses surface discharge concerns and amounts that will impact the environment.

Dewatering also has the potential to have a much larger effect on groundwater levels during low flow rates and due to the localized nature of some aquifers. Adjacent wells located within the cone of groundwater depression may be affected by water level lowering. If an adjacent waterway is in the cone of depression, stream flow may be reduced due to reduction in groundwater recharge.

Sand and gravel pits should be located so they do not drawdown nearby wells, wetlands, or streams. A detailed knowledge of the discharge areas in nearby streams and wetlands, the amount of groundwater inflow and its source, and the surrounding water table influenced by dewatering could be used in design plans to prevent damage to aquatic habitats. Current knowledge and investigations of local hydrology need to be considered when projects are designed. If damage to sensitive environmental resources or private property are possible, then requirements for more detailed study, monitoring and adaptive management of groundwater for particular site should be required through permit conditions. However, requiring detailed hydrogeological analysis for every mine site would not be economically feasible for mine operators or the state.

3. Pollution occurs if fuel, chemicals, oil and grease at an excavation site are not handled and stored properly. If spills occur and are not attended to immediately, surface and groundwater contamination can result. A spill avoidance and response plan is required for use of this EA and must be submitted with the application to provide for quick response and cleanup to leaks or spills of hazardous substances that may occur on site.

Criteria in Appendix A are not all-inclusive for projects to be exempt from the need for an individual EA. If there are site-specific circumstances that would render the criteria ineffective in assuring prevention of significant adverse environmental impacts or if there is an environmental concern not addressed by the criteria, an individual EA could still be required at DNR's discretion.

Alternatives

For proposed mine operations that meet the established criteria, it is to be assumed that the only viable alternative is the proposal for which a permit has been requested. By meeting the siting, design and operational criteria, undesirable alternatives have been removed from consideration prior to submittal of the permit application. This analysis also assumes that the "no action" alternative is not economically viable for the applicant. The alternatives associated with establishment of the streamlined review and permitting system are as follows:

NO ACTION: The “no action” alternative would perpetuate the 7-12 month time to process permit applications. Furthermore, mine sites will continue to be reviewed on a site by site basis with minimal consideration given by operators during project planning to the surrounding environmental landscape.

EXPAND EA EXEMPTION CRITERIA: The criteria listed in Appendix A are inclusive of those environmental factors that determine if a nonmetallic mining project may have the potential for significant adverse environmental impacts. The criteria are not fixed and could be expanded at any time at DNR discretion. Also, if an applicant decided that the criteria were too restrictive for his project plans, that applicant could opt to go through DNR's normal, individual EA, environmental review process.

EXPAND EA EXEMPTION TO OTHER LOCATIONS OUTSIDE MARATHON COUNTY: The concept of an EA exemption for nonmetallic mining projects in Marathon County is directly related to the geographic concentration of mining activity and the interest of county and mining representatives in a partnership approach/agreement which aims to conduct mining in an environmentally sound manner and improve (reduce duplication and streamline) the regulatory review process. It is conceivable that the EA exemption for similarly qualifying projects could be applied elsewhere in the state if industry and local officials are interested. It may be prudent to test the revised review process as a pilot effort in Marathon County for a reasonable time to see if the process change results in expected environmental and streamlining benefits.

REDUCE EA EXEMPTION CRITERIA: Narrowing the criteria in Appendix A would result in a risk that significant environmental impacts may result from a project permit decision that could have been avoided had an individual EA been prepared.

MODIFY EA EXEMPTION CRITERIA: Criteria in Appendix A are thought to address all potential issues that may result in significant adverse environmental impacts. Changes could be made at any time new criteria were thought appropriate, or, existing criteria thought to be redundant or no longer necessary.

Significance of Precedent

Issuance of permits for nonmetallic mining operations along navigable waters is not a precedent setting action. The existence of numerous, legally permitted and operating, nonmetallic mines along navigable waters in Marathon County signifies that nonmetallic mines can operate and still meet Wisconsin's strict environmental standards. The development or expansion of nonmetallic mines is governed by the demand for the raw materials. The development of a generic EA, by itself, is not expected to promote the expansion of nonmetallic mining within the County, but rather facilitate environmental sound growth of the industry. Nonmetallic mines conforming to the design and operational criteria of the generic EA are not anticipated to cause cumulative impacts, environmental pollution and will meet the environmental standards specified by administrative code.

Permits will be issued as before. The potential for precedence is in not doing an EA. Not writing an EA is not a unique concept for different degrees of development of the same type of action. NR 150 lists all agency actions and a proportionate level of environmental review thought necessary based on potential for significant impacts. Many DNR regulatory and management actions are broken down into different environmental review categories based on emission levels, area/volume of physical disturbance, etc. For example, dredging projects require EA's only if the volume of material to be moved exceeds 3000 cubic yards. In this case, by developing EA exemption criteria for nonmetallic mining that are specifically planned to prevent any adverse impacts, it would be redundant to prepare an EA to determine project impact potential. Also, opportunity for public input into DNR permit decision will still be provided as the normal public noticing process is required. There is a degree of precedence to the proposed actions,

because a streamlined review and permit process for gravel mines has not been implemented before in Marathon County or elsewhere in Wisconsin.

Cumulative Impacts

Unfortunately, there has not been a great deal of research done on the cumulative effects of nonmetallic mineral mining (extensive studies are needed to adequately address cumulative impacts). In the past the Department has typically reviewed nonmetallic mining proposals in riverine systems on a case-by-case basis

and prepared an individual EA.

Generally, long-term cumulative impacts will not be as significant for nonmetallic mining sites as with other types of construction activities that forever alter the environmental setting of the site. In 1999, new reclamation standards (NR 135, Wis. Adm. Code) were adopted requiring all counties to pass reclamation ordinances. These standards ensure that after nonmetallic mining sites are "closed", the site will be restored to provide as many of the pre-existing natural resource functions as technically feasible.

A great deal of floodplain habitat in Marathon County is, and already has been, affected by mining activities. Mining adjacent to waterways has the potential to destroy critical habitat and can degrade water quality. Continued removal of adjacent uplands may alter watershed hydraulics over a longer period of time. However, utilizing environmental precautions during the mining phase may significantly lower the risk of impairing a waterway. Furthermore, with proper reclamation of a site, quality habitat can be created, although it is unlikely that it will have the same functions and values as the pre-existing habitat.

It appears that the most significant cumulative effects are in the loss of wooded and "wild" streamside habitat. While reclaimed sites may eventually succeed back into wooded habitat, the overall integrity of the stream corridor will never be precisely the same. By encouraging applicants to voluntarily plan their projects to adhere to the criteria in Appendix A it can be expected that, overall, projects will be sited, designed and operated in a manner than will prevent significant adverse environmental impacts. Buffer zones and separation distances from sensitive areas will be established. Erosion control, site reclamation and other such plans will be in place as part of the application, not developed later in response to permit requirements for projects that may not be sited and designed considering environmental compatibility in the first place. As such, there may be a positive cumulative environmental effect as industry mine development patterns and operational changes take place in order that a streamlined permitting process is available.

Project Significance

Some negative changes to the physical and biological environment typically occur with the active phase of any nonmetallic mining project in Marathon County or elsewhere. However, reclamation will result in new physical and biological environments that have the potential to be equal to or higher in quality than pre-existing conditions.

In the short-term environmental effects from mining will displace wildlife and cause extreme landscape changes. Removal of the nonmetallic mineral of interest will result in site disturbances that will alter the site irreversibly. With proper reclamation, the long-term effects should be minimal. Depending on the conditions of the site prior to mining, the reclaimed site may actually support a more diverse habitat. In some cases, the habitat created will be significantly different from the pre-mining habitat as in the case of a wooded area. To be eligible for a streamlined environmental review process, proposed nonmetallic mine sites must not have historical or cultural scarce resources, threatened or endangered species, or ecologically sensitive areas.

The design and operation criteria listed in Appendix A should result in at least some operators voluntarily planning their projects in a more environmentally sound manner. There will also be some reduction in DNR project review time, faster permit decisions for applicants, better coordination/consistency between county and state nonmetallic mining regulators, and improved understanding by applicants of common environmental concerns associated with their projects, and measures that can be taken to reduce those concerns. While these are all positive changes, none of these effects are expected to be significant.

Significance of Risk

By virtue of the interagency issue identification process and cooperative development of qualifying criteria in Appendix A, there are minimal environmental risks associated with exempting qualifying projects (those which are specifically sited, designed and operated to prevent significant environmental impacts) from going through a detailed environmental review process. If the revised process is tested and problems

develop, at DNR's discretion the process can be changed (or eliminated), criteria changed or other remedies can be implemented. Also, DNR retains the discretion to prepare an EA for any project regardless if the EA exemption criteria are satisfied.

There may be a risk that operators plan their projects consistent with criteria listed just to avoid the time delay for the DNR to prepare an individual EA, then develop and operate the project in a manner that does not meet the criteria. Construction monitoring by the County will assure all permit conditions, including those that qualified the project to be EA exempt, are followed. If not, appropriate enforcement action, possibly including site restoration, would be taken.

Contributors

The following persons have participated in the coordination, development, and review of this EA:

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Chad Cook, Septage Program Coordinator, WI DNR
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Glen Kafka, Kafka Granite, LLC
Candy Anderson, Red Flint Group

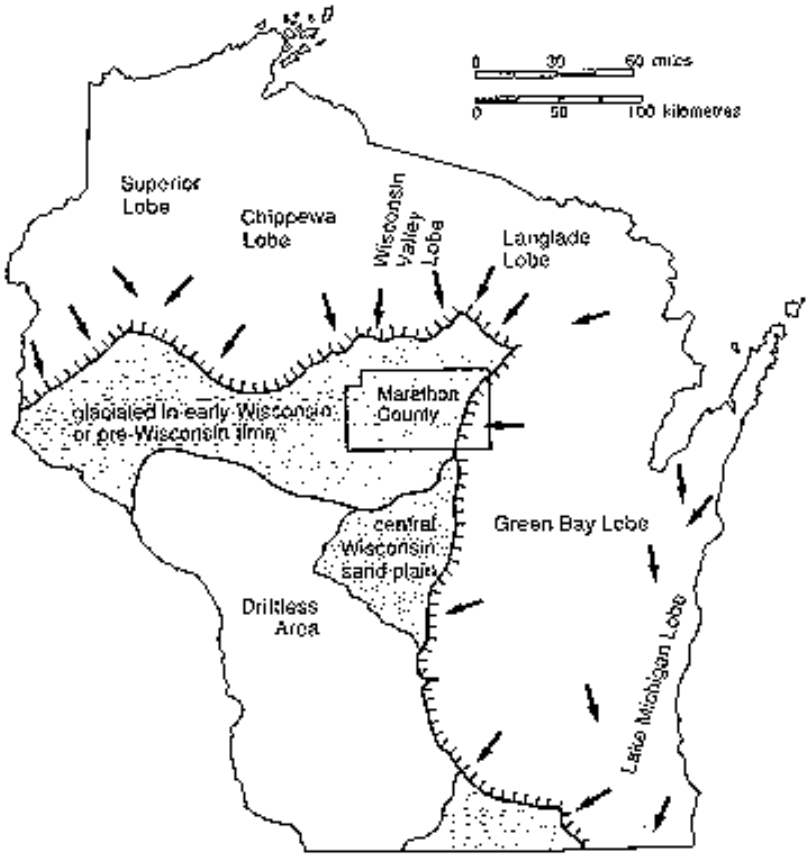

Figure 1. Glaciation in Wisconsin during late Wisconsin ice flow

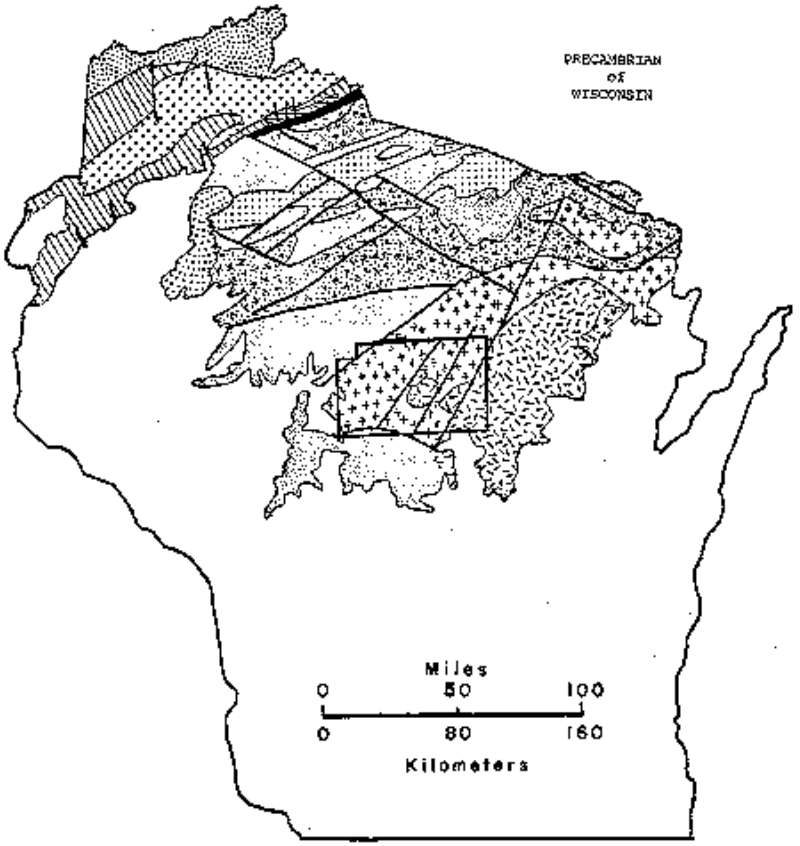

Figure 2. Generalized geological map of Precambrian rocks

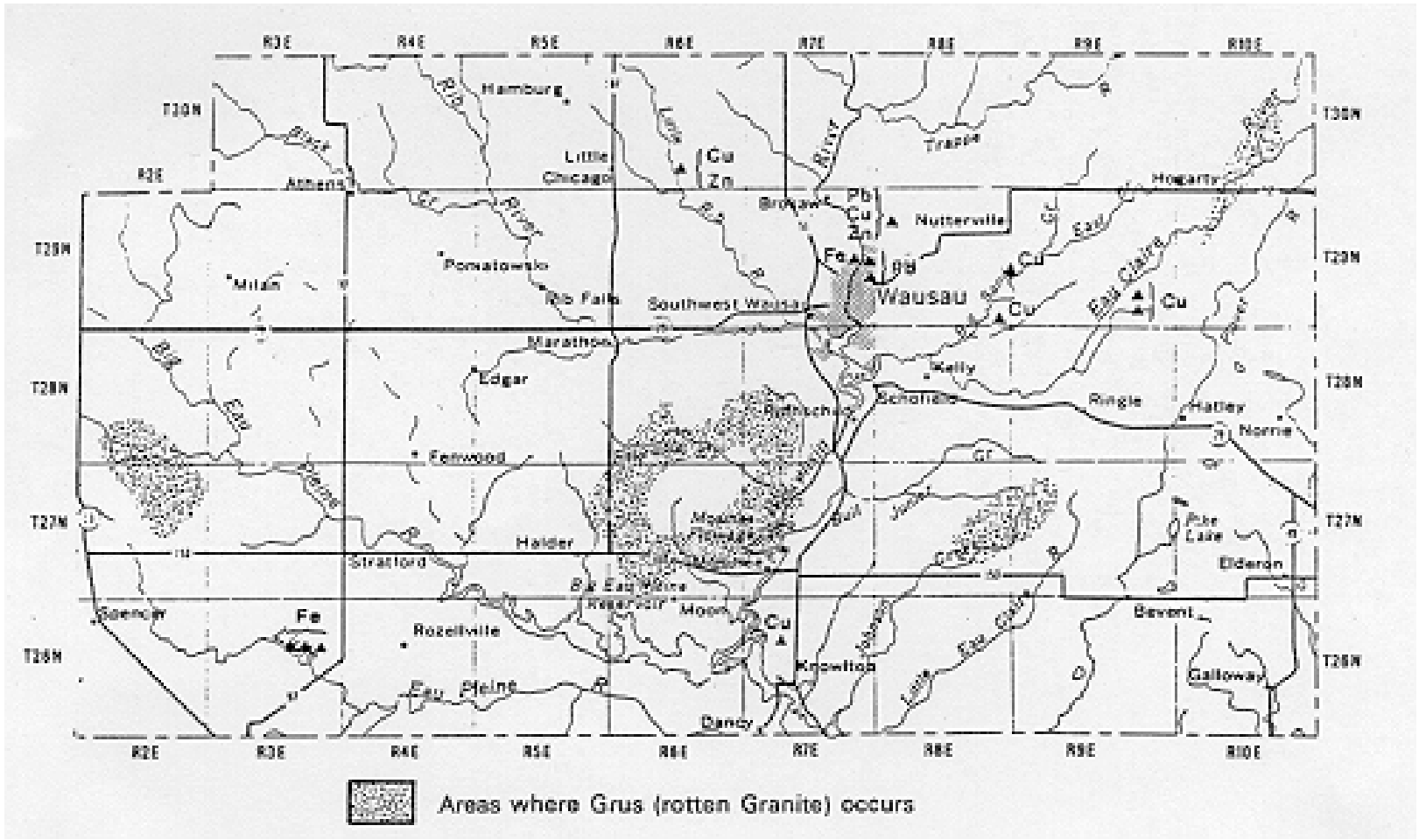

Figure 3. Occurrence of grus in Marathon County

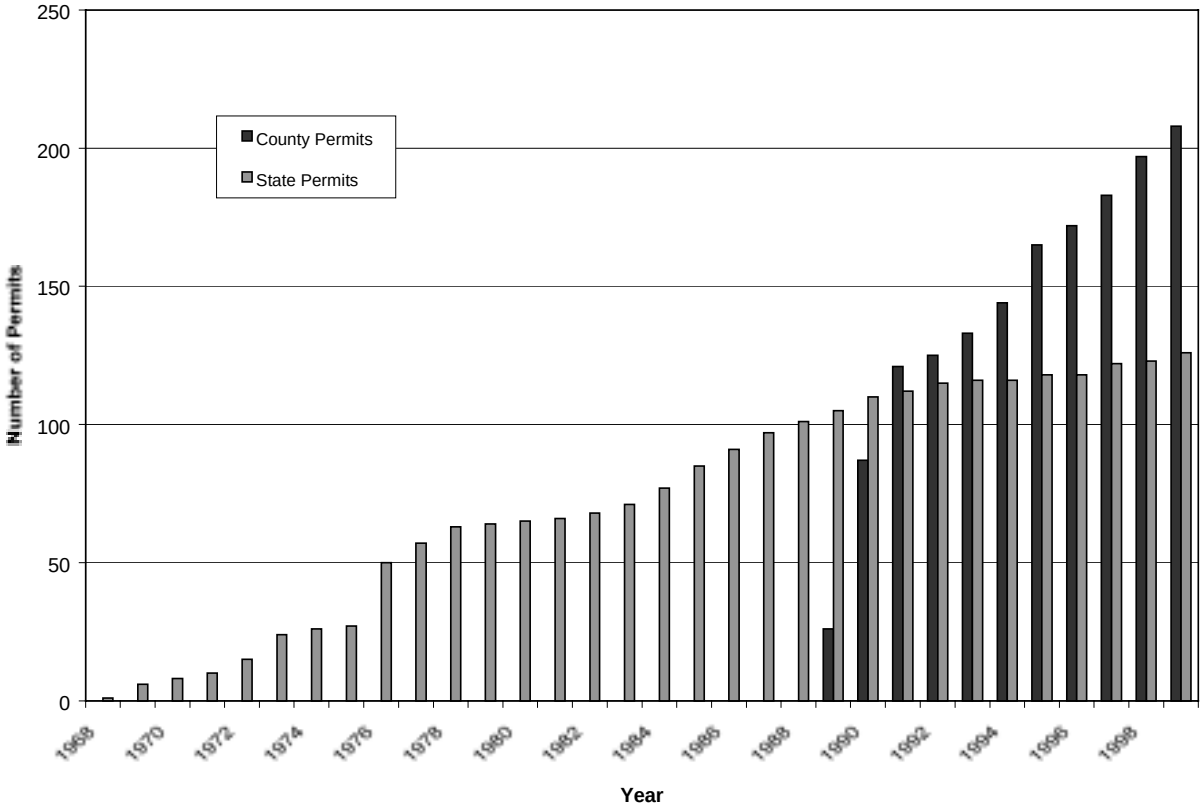

Figure 4. Cumulative record of nonmetallic mining permits issued in Marathon County.

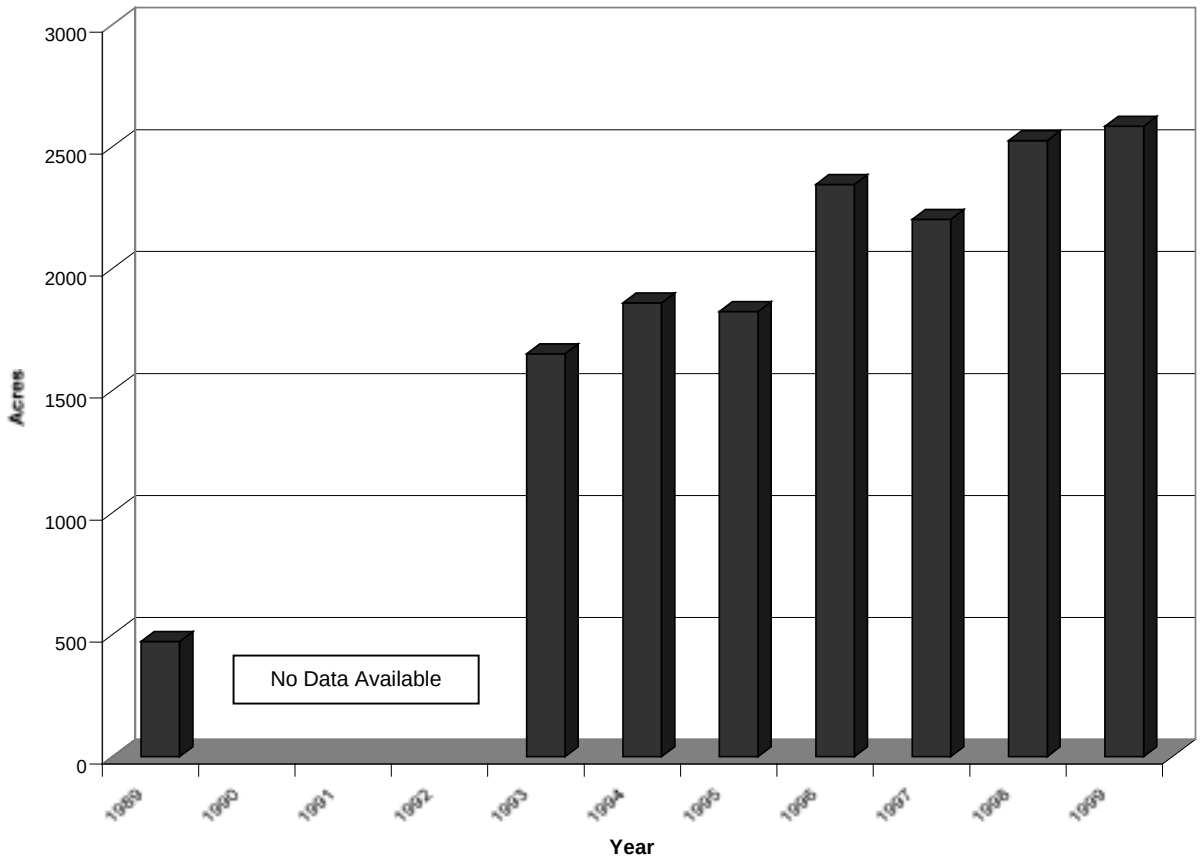

Figure 5. Active nonmetallic mine acres under Marathon County permits

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Project Name: Generic EA for Qualifying Nonmetallic Mining Projects

County: Marathon

DECISION (This decision is not final until certified by the appropriate authority)

In accordance with s. 1.11, Stats., and Ch. NR 150, Adm. Code, the Department is authorized and required to determine whether it has complied with s. 1.11, Stats., and Ch. NR 150, Wis. Adm. Code.

Complete either A or B below:

A. EIS Process Not Required ☐

The attached analysis of the expected impacts of this proposal is of sufficient scope and detail to conclude that this is not a major action which would significantly affect the quality of the human environment. In my opinion, therefore, an environmental impact statement is not required prior to final action by the Department on this project.

B. Major Action Requiring the Full EIS Process ☐

The proposal is of such magnitude and complexity with such considerable and important impacts on the quality of the human environment that it constitutes a major action significantly affecting the quality of the human environment.

Signature of Evaluator	Date Signed

Number of responses to news release or other notice: _____
Public response log attached? Yes [ ] No [ ]

Certified to be in compliance with WEPA	
REGIONAL Director or Director of Bureau of Integrated Science Services (or designee)	Date Signed

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed.

For judicial review of a decision pursuant to sections 227.52 and 227.53, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to section 227.42, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. The filing of a request for a contested case hearing is not a prerequisite for judicial review and does not extend the 30-day period for filing a petition for judicial review.

Note: Not all Department decisions respecting environmental impact, such as those involving solid waste or hazardous waste facilities under sections 144.43 to 144.47 and 144.60 to 144.74, Stats., are subject to the contested case hearing provisions of section 227.42, Stats.

This notice is provided pursuant to section 227.48(2), Stats.

Appendix A

Generic EA Eligibility Criteria and Design Standards

Siting

The general EA will *not* apply to those nonmetallic mining operations that

1. Are located adjacent to water bodies designated as Outstanding or Exceptional Water Resources.
2. Have two-thirds (66%) or more of the lands immediately adjoining the proposed site in public Ownership (federal, state, or local ownership).
3. Are located on parcels of land that have sites of historical or archaeological significance.
4. Are located on parcels of land that have the potential of adversely impacting species identified by the Natural Heritage Inventory as being threatened or endangered.

Design

General design criteria must include the following:

1a. 100' Non-disturbance area adjacent to navigable waters, measured from Ordinary High Water Mark (OHWM)
b. 100' Non-disturbance area around any wetlands
c. Agreement to Marathon County's Nonmetallic Mine Shoreland Vegetation Buffer Agreement

2a. Replace topsoil moved during excavation
b. Use approved seed mixture
c. County will determine bonding levels in accordance with NR 340 and NR 135

3a. At least 25% of pond area greater than 12' deep (Applicable to all ponds located in the flood plain and those located outside of the flood plain that have a post-reclamation use of a fishery)
A percentage of pond area must be less than 3' deep
20% if shallows are all in one area
18% if shallows are split between 2 areas
15% if shallows are split between 3 areas
12% if 50% of the shoreline is left with a 20' wide shallow shelf beyond the sloping requirements.
Any additional area can be in the form of submerged islands with an area greater than 900 sq. ft. (Applicable to all ponds regardless of location. This percentage is in addition to the area of the pond less than 3' deep created by the shoreline slope requirements)

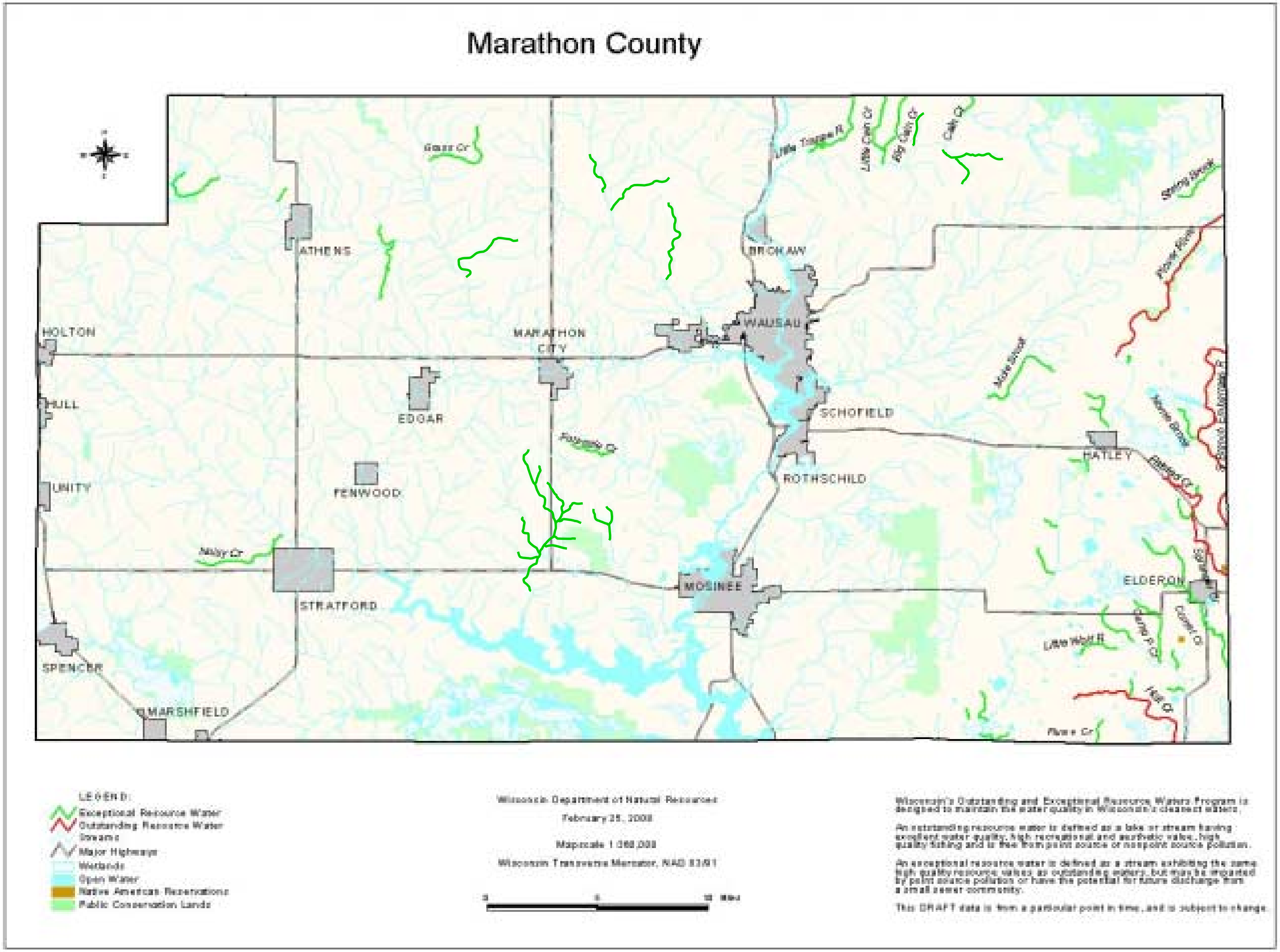
b. Uneven, rolling bottom with a variety of substrate materials and particle sizes (Applicable to all ponds. For area of pond less than 3' deep, the uneven bottom should range from 6" deep to 3' deep)
c. Undulating shoreline with numerous points, coves, and bays (Applicable to all Ponds)
d. Replace 3" of topsoil to a water depth of 3' (Applicable to all ponds. Does not apply to shallow area (less than 3' deep) created by side slope requirements)
e. No islands may be created
f. There should be no connections to the adjacent waterbody
g. Artificial structure placement in ponds-i.e. logs, stumps, other material (Use material from the site to enhance pond structure)
h. Ponds should have slopes no steeper than 3:1 (horizontal to vertical) to a depth of 6' of water (18' out from shore)

Operation

Application materials must include the following:

1. DNR approved Erosion Control Plan
2. Wisconsin Pollutant and Waste Discharge Elimination Permit (WPDES) application (if applicable)
3. Spill prevention and response plan

Appendix B


Marathon County
HOLTON
HULL
UNITY
SPENCER
MARSHFIELD
ATHENS
EDGAR
FENWOOD
STRATFORD
MARATHON CITY
BROKAW
WAUSAU
SCHOFIELD
ROTHSCHILD
MOSINEE
HATLEY
ELDERON
LEGEND:
Exceptional Resource Water
Outstanding Resource Water
Streams
Major Highways
Wetlands
Open Water
Native American Reservations
Public Conservation Lands
Wisconsin Department of Natural Resources
Wisconsin Transverse Mercator, NAD 83/91
Wisconsin's Outstanding and Exceptional Resource Waters Program is designed to maintain the water quality in Wisconsin's cleanest waters.
An outstanding resource water is defined as a lake or stream having excellent water quality, high recreational and aesthetic value, high quality fishing and is free from point source or nonpoint source pollution.
An exceptional resource water is defined as a stream exhibiting the same high quality resource values as outstanding waters, but may be impacted by point source pollution or have the potential for future discharge from a small sewer community.
This DRAFT data is from a particular point in time, and is subject to change.

Appendix C

RARE, THREATENED AND ENDANGERED SPECIES
AND NATURAL COMMUNITIES IN
MARATHON COUNTY

PLANTS		
Common Name	**Species Name**	**Wisconsin Status[1]**
Deam's Rockcress	*Arabis missouriensis var deamii*	Special Concern*
Pale Beardtongue	*Penstemon pallidus*	Special Concern
Purple Clematis	*Clematis occidentalis*	Special Concern
Showy Lady's-Slipper	*Cypripedium reginae*	Special Concern
Snowy Campion	*Silene nivea*	Threatened
Vasey's Pondweed	*Potamogeton vaseyi*	Special Concern

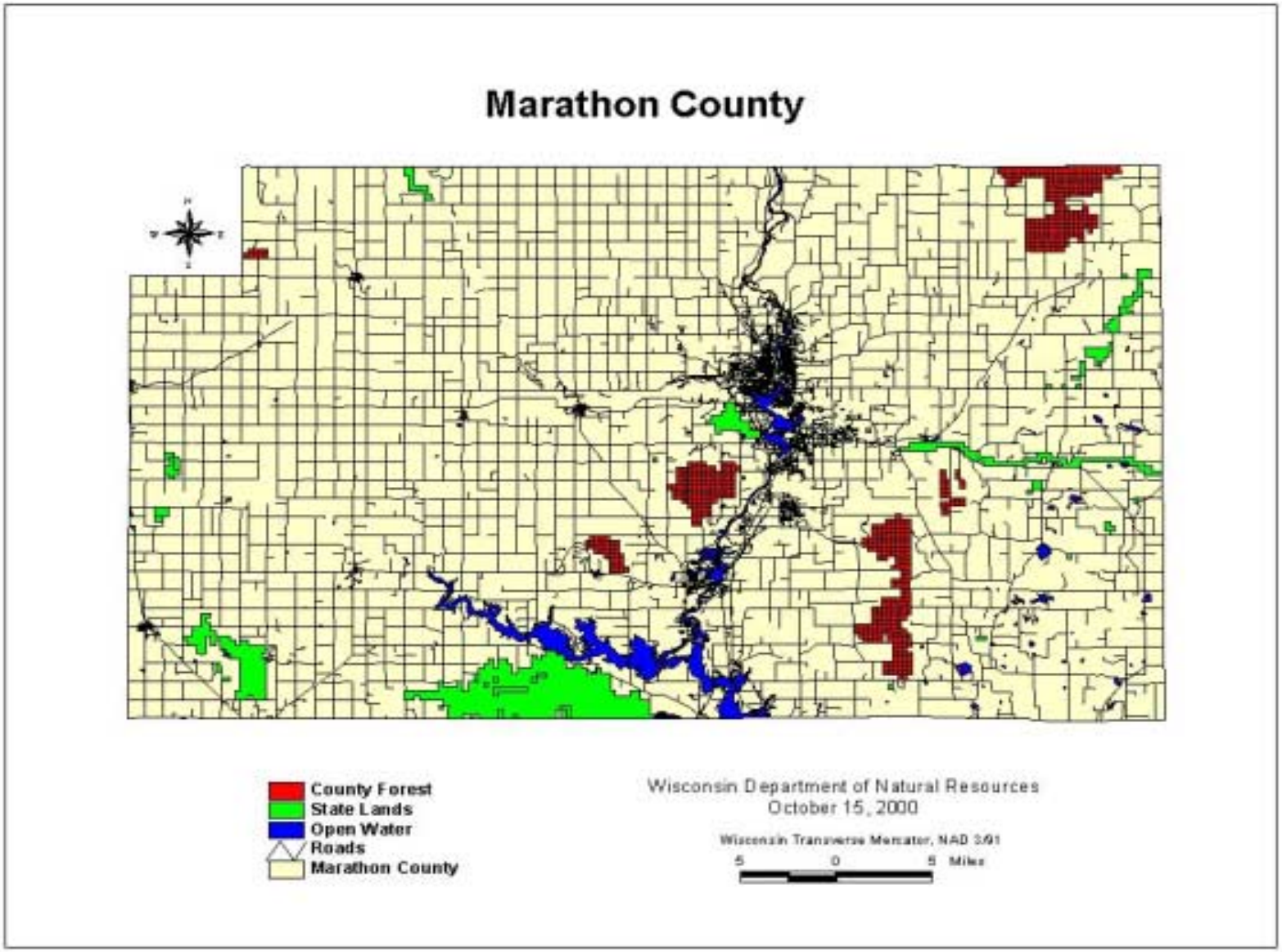
ANIMALS			
Common Name	**Species Name**	**Wisconsin Status[1]**	**Taxa**
Bald Eagle	*Haliaeetus leucocephalus*	Special Concern**	Bird
Black-Crowned Night-Heron	*Nycticorax nycticorax*	Special Concern	Bird
Greater Prairie-Chicken	*Tympanuchus cupido*	Threatened	Bird
Osprey	*Pandion haliaetus*	Threatened	Bird
Red-Shouldered Hawk	*Buteo lineatus*	Threatened	Bird
Tawny Crescent Spot	*Phyciodes batesii*	Special Concern*	Butterfly
Cyrano Darner	*Nasiaeschna pentacantha*	Special Concern	Dragonfly
Green-Faced Clubtail	*Gomphus veridifrons*	Special Concern	Dragonfly
Pygmy Snaketail	*Ophiogomphus howei*	Threatened*	Dragonfly
Skillet Clubtail	*Gomphurus ventricosus*	Special Concern	Dragonfly
Splendid Clubtail	*Gomphurus lineatifrons*	Special Concern	Dragonfly
Stygian Shadowfly	*Neurocordulia yamaskanensis*	Special Concern	Dragonfly
Black Redhorse	*Moxostoma duquesnei*	Endangered	Fish
Pirate Perch	*Aphredoderus sayanus*	Special Concern	Fish
Redside Dace	*Clinostomus elongatus*	Special Concern	Fish
Arctic Shrew	*Sorex arcticus*	Special Concern	Mammal
White-Tailed Jackrabbit	*Lepus townsendii*	Special Concern	Mammal
Buck Moth	*Hemileuca maia*	Special Concern	Moth
Elktoe	*Alasmidonta marginata*	Special Concern*	Mussel
Blanding's Turtle	*Emydoidea blandingii*	Threatened*	Turtle
Wood Turtle	*Clemmys insculpta*	Threatened	Turtle

Appendix C

Natural Communities Important examples of the following natural community types have been found in this county. Although communities are not legally protected, they are critical components of Wisconsin's biodiversity and may provide the habitat for rare, threatened and endangered species.		
Alder Thicket	Moist Cliff	Spring Pond
Dry Cliff	Northern Dry-Mesic Forest	Springs And Spring Runs, Hard
Emergent Aquatic	Northern Mesic Forest	Stream--Fast, Hard, Cold
Floodplain Forest	Northern Sedge Meadow	Stream--Fast, Hard, Warm
Lake--Deep, Hard, Seepage	Northern Wet Forest	Stream--Fast, Soft, Cold
Lake--Deep, Soft, Seepage	Northern Wet-Mesic Forest	Stream--Slow, Hard, Warm
Lake--Shallow, Hard, Seepage	Open Bog	
Lake--Shallow, Soft, Seepage	Shrub-Carr	

[1]**Wisconsin Status:**
Endangered: continued existence in Wisconsin is in jeopardy.
Threatened: appears likely, within the foreseeable future, to become endangered.
Special Concern: species for which some problem of abundance or distribution is suspected but not yet proven.
Rule: protected or regulated by state or federal legislation or policy; neither endangered nor threatened.
* indicates: A candidate for federal listing.
** indicates: Federally Endangered or Threatened.

Appendix D


Marathon County
County Forest
State Lands
Open Water
Roads
Marathon County
Wisconsin Department of Natural Resources
October 15, 2000
Wisconsin Transverse Mercator, NAD 3/91
5 0 5 Miles

Appendix E

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SHORELAND VEGETATION
BUFFER AGREEMENT –Nonmetallic Mining—

Document Number / Plan I.D. No	This Agreement is made between the Governmental Unit and riparian Owner(s).	DRAFT
Parcel Identifier Number (PIN)	Agreement Date	
Governmental Unit Marathon County Zoning Department	Riparian Owner(s)	

We, Riparian Owner(s) (Owner) acknowledge that application is being made for the creation of a nonmetallic mine in the shoreland area on the following Property
(Provide legal land description. Use reverse side if additional space is needed):

_____
_____
_____
_____

Name and Return Address

As a condition of the Governmental Unit to issue a nonmetallic mine reclamation (NMR) permit for the above described Property, Owner(s) agree to the following:

1. Owner will conform to all applicable requirements of the General Code of Ordinances for Marathon County, Chapter 17 Zoning Code relating to shoreland vegetative buffer zone establishment, restoration, enhancement and/or preservation. The definition of a vegetative buffer zone for the purpose of this agreement is: An area along, and parallel to, the ordinary high water mark, 100 feet from the water's edge landward to the mine site, that is either undisturbed or restored with native vegetation that provides or will provide natural features and functions for fish and wildlife habitat, water quality protection, and natural scenic beauty.
2. Authorized representatives of Governmental Unit may enter onto the Owner's Property at the above description to inspect the mine site authorized by the NMR permit and to determine if the shoreland vegetative buffer as approved in the Owner's plan has been established, restored, enhanced and/or preserved.
3. Governmental Unit may revoke the NMR permit and order reclamation of the nonmetallic mine authorized by the NMR permit if at any time it is determined that the shoreland vegetative buffer has been removed, destroyed, degraded, allowed to deteriorate, and/or reduced in size contrary to the Owner's approved plan.
4. Reclamation of the site as required by the NMR permit will not terminate this Agreement or allow for the removal, destruction, degradation and/or reduction in size of the shoreland vegetative buffer.
5. This Agreement will remain in effect until Governmental Unit, which is responsible for the issuance of NMR permits and regulation of the shoreland vegetative buffers, certifies that the Owner is no longer required to maintain the vegetative shoreland buffer.
6. This Agreement is binding upon the Owner and his/her heirs, successors, and assigns. The Owner shall have this Agreement filed and recorded with the Marathon County Register of Deeds in a manner which will permit the existence of the Agreement to be determined by reference to the Property containing the shoreland vegetative buffer, and for which the NMR permit has been issued.

Owner(s) Name(s) - **Please print**:	Subscribed and sworn to before me on this date: _____	Governmental Unit Official Name - **Please print**:
		Governmental Unit Official Title - **Please print**:
Notarized Owner(s) Signature(s):	_____ Notary Public (Signature) My commission expires: _____	Governmental Unit Official Signature:

Drafted by: _____
Shorlnd Buffer aff.wpd:12/12/00

Personal information you provide may be used for secondary purposes [Privacy Law, s.15.04(1)(m)]

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